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Experience

5/2001-present	Research Scientist II	School of Electrical & Computer Engineering, Georgia Institute of Technology, USA	<ul style="list-style-type: none"> • Developing wideband circularly polarized antennas. • Designing small-size and multi-band/broadband antennas for mobile/ wireless applications. • Exploring antenna solutions for integrated RF front-ends based on multi-layer technologies, such as LTCC, LCP, and MLO. • Developing dual-frequency/dual-polarization patch antenna arrays on LCP for space applications. • Developed reactively loaded antenna elements for beam steering. • Invented new antenna structures for space and wireless applications. • Investigated the potential applications of array thinning in base stations and automotive anti-collision radars.
5/2000-5/2001	Research Fellow	School of Electrical & Electronic Engineering, Queen's University, Belfast, UK	<ul style="list-style-type: none"> • Taught graduate students The Numerical Techniques (FEM, MoM, and FDTD) for Electromagnetic Analysis. • Taught graduate students Advanced Engineering Electromagnetics. • Taught Antenna Theory and Design for undergraduate students.
7/1998-5/2000	Professor	Department of Electrical Engineering, Zhejiang University, China	<ul style="list-style-type: none"> • Analyzed SAR distributions in human head due to radiation from mobile phone antennas. • Simulated the induced currents in human body nearby ELF/VLF devices • Developed numerical models for analysis of transient electromagnetic environments. • Taught Electromagnetic Fields and Waves to undergraduate students.
(2/1999-9/1999)	Research Associate	Department of Electrical Engineering, University of Utah, USA	<ul style="list-style-type: none"> • Developed a new MoM formulation for analysis of probe-fed printed antennas. • Analyzed multi-arm circularly polarized printed antennas.
7/1996-7/1998	Associate Professor	Department of Electrical Engineering, Zhejiang University, China	<ul style="list-style-type: none"> • Developed FEM models for magnetic suspension devices. • Investigated the computational model for inductive heaters.
(4/1997-3/1998)	Research Fellow	College of Engineering, Hosei University, Japan	<ul style="list-style-type: none"> • Developed the B-Spline FEM for analyzing antennas and microwave components. • Investigated the temperature distribution in turbo generators. • Qualified computer software engineer.
7/1994-7/1996	Postdoctoral Fellow	Department of Electrical Engineering, Zhejiang University, China	<ul style="list-style-type: none"> • Developed the B-Spline FEM for calculating 2D electromagnetic fields.
7/1990-7/1994	Ph.D. Student	Department of Electrical Engineering, Chongqing University, China	<ul style="list-style-type: none"> • Involved in analysis of over-voltage fault in power system, high voltage testing of electric power apparatus, and initial design for Yunnan Ultra High Voltage Laboratory.
9/1987-7/1990	Master Student	Department of Electrical Engineering, Chongqing University, China	<ul style="list-style-type: none"> • Studied in High Voltage Technology and Insulation Engineering.
8/1983-9/1987	Electrical Engineer	Electric Power Research Institute, Yunnan Province, China	
9/1979-8/1983	Bachelor Student	Department of Electrical Engineering, Xi'an Jiatong University, China	

Awards and Honors

- **Scientific and Technical Achievement Award** (First Prize), Ministry of Education of P. R. China, 1996.
- **Scientific and Technical Achievement Award** (Second Prize), Bureau of Education of Zhejiang Province, P. R. China, 2000.
- **Four Best Paper Awards** from Zhejiang Province, 1997-1999.
- **Six Wang Guosong Distinguished Achievement Awards** from Zhejiang University, 1997-2000.
- **Senior Member**, IEEE, 2003.
- **Member** of the International Compumag Society, 2003.
- **Reviewer** of IEEE Transactions on Antenna and Propagation, IEEE Antenna and Wireless Propagation Letters, IEEE Microwave and Wireless Components Letters, the International Journal of Wireless Personal Communications, and Korea ETRI Journal.

Patents

- **Multi-Band Broadband Planar Antennas**, US Patent, No. 6917339B2, 2003.
- **New Antenna Structures**, British Patent Application No. 0115023.4, Filed 20 June 2001.
- **Broadband Monopole Antenna**, British Patent Application No. 0115023.7, Filed 20 June 2001.
- **Size-Reduced Folded Shorted-Patch Antenna for Wireless Communications**, US Provisional Patent Application No. 60/340977, December 2001.
- **Wideband Short Backfire Antenna**, Georgia Tech Invention Disclosure, GTRC ID 3055, Dec. 2003.
- **Broadband Miniaturized Antenna**, Georgia Tech Invention Disclosure, GTRC ID 3056, Dec. 2003.

Selected Publications (Journal Papers)

- [1] **RongLin Li**, D. Thompson, J. Papapolymerou, J. Laskar, and M. M. Tentzeris, "A circularly polarized short backfire antenna excited by an unbalance-fed cross aperture," *IEEE Trans. Antennas Propagat.*, vol. 54, no. 3, March 2006.
- [2] **RongLin Li**, J. Laskar, and M. M. Tentzeris, "Broadband circularly polarized rectangular loop antenna with impedance matching," *IEEE Microwave & Wireless Components Letters*, vol. 16, no. 1, pp. 52-54, Jan. 2006.
- [3] **RongLin Li**, J. Laskar, and M. M. Tentzeris, "Bandwidth and gain improvement of a circularly polarized dual-rhombic loop antenna," *Accepted for IEEE Antennas and Wireless Propagation Letters*, Jan. 2006.
- [4] **RongLin Li**, S. Basat, J. Laskar, and M. M. Tentzeris, "Development of wideband circularly polarized square- and rectangular-loop antennas' *Accepted for IEE Proc. Microwaves, Antennas & Propagation*, Jan. 2006.
- [5] **RongLin Li**, N. Bushyager, J. Laskar, and M. M. Tentzeris, "Determination of reactance loading on circular loop antennas for a uniform traveling-wave current distribution," *IEEE Trans. Antennas Propagat.*, vol. 53, no. 12, pp. 3920-3929, Dec. 2005.

- [6] **RongLin Li**, G. DeJean, J. Laskar, and M. M. Tentzeris, "Investigation of circularly polarized loop antennas with a parasitic element for bandwidth enhancement," *IEEE Trans. Antennas Propagat.*, vol. 54, no. 12, pp. 3930-3939, Dec. 2005.
- [7] **RongLin Li**, D. Thompson, J. Papapolymerou, J. Laskar, and M. M. Tentzeris, "A new excitation technique for wideband short backfire antenna," *IEEE Trans. Antennas Propagat.*, vol. 53, no. 7, pp. 2313-2320, July 2005.
- [8] **RongLin Li**, J. Laskar, and M. M. Tentzeris, "Wideband probe-fed circularly polarized circular loop antenna," *Electronics Letters*, vol. 41, no. 18, pp. 997-999, Sept. 2005.
- [9] **RongLin Li**, D. Thompson, M. M. Tentzeris, J. Laskar, and J. Papapolymerou, "Development of a wide-band short backfire antenna excited by an unbalance-fed H-shaped slot," *IEEE Trans. Antennas Propagat.*, vol. 53, no. 2, Feb. 2005.
- [10] **RongLin Li**, G. DeJean, M. M. Tentzeris, J. Papapolymerou, and J. Laskar, "Radiation-Pattern improvement of patch antennas on a large-size substrate using a compact soft-surface structure and its realization on LTCC multilayer technology," *IEEE Trans. Antennas Propagat.*, vol. 53, no. 1, pp. 200-208, Jan. 2005.
- [11] **RongLin Li**, G. DeJean, M. Maeng, K. Lim, S. Pinel, M. M. Tentzeris, and J. Laskar, "Design of compact stacked-patch antennas in LTCC multilayer packaging modules for wireless applications," *IEEE Trans. Adv. Packag.*, vol. 27, no. 4, pp. 581-589, Nov. 2004.
- [12] M. M. Tentzeris, J. Laskar, J. Papapolymerou, S. Pinel, V. Palazzari, **RongLin Li**, G. DeJean, N. Papageorgiou, D. Thompson., R. Bairavasubramanian, S. Sarkar, and J.-H. Lee, "3-D-Integrated RF and millimeter-wave functions and modules using liquid crystal polymer (LCP) system-on-package technology," *IEEE Trans. Adv. Packag.*, vol. 27, no. 2, pp. 332-340, May 2004.
- [13] **RongLin Li**, G. DeJean, M. M. Tentzeris, J. Papapolymerou, and J. Laskar, "FDTD analysis of patch antennas on high dielectric-constant substrate surrounded by a soft-and-hard surface," *IEEE Trans. Magnetics*, vol. 40, no. 2, pp. 1444-1447, Mar. 2004.
- [14] **RongLin Li**, G. DeJean, M. M. Tentzeris, and J. Laskar, "Development and Analysis of a Folded Shorted-Patch Antenna with Reduced Size," *IEEE Trans. Antennas Propagat.*, vol. 52, no. 2, pp. 555-562, Feb. 2004.
- [15] V. Fusco, R. Cahill, **RongLin Li**, "Quadrifilar loop antenna," *IEEE Trans. Antennas Propagat.*, vol. 51, no. 1, pp. 115-120, 2003.
- [16] **RongLin Li** and V. Fusco, "Slant 45 degrees beam steering using a capacitive loaded patch antenna," *Microwave and Optical Technology Letters*, vol. 37, no. 5, pp. 352-355, June 2003.
- [17] **RongLin Li**, V. Fusco, and H. Nakano, "Circularly polarized open-loop antenna," *IEEE Trans. Antennas Propagat.*, vol. 51, no. 9, pp. 2475-2477, Sept. 2003.
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- [19] **RongLin Li** and V. Fusco, "Beam steered reactively loaded printed microstrip loop antennas," *IEE Proceedings-Microwaves, Antennas and Propagation*, vol. 149, no 3, pp. 169 -174, June 2002.
- [20] **RongLin Li**, M. M. Tentzeris, J. Laskar, J., V. Fusco, R. Cahill, "Broadband loop antenna for DCS-1800/IMT-2000 mobile phone handsets," *IEEE Microwave and Wireless Components Letters*, vol. 12, no. 8, pp. 305-307, Aug. 2002.
- [21] **RongLin Li** and V. Fusco, "Broadband semiloop antenna," *Microwave and Optical Technology Letters*, vol. 34, no. 4, pp. 233-234, Aug. 2002.

- [22] **RongLin Li** and V. Fusco, "Circularly polarized twisted loop antenna," *IEEE Trans. Antennas Propagat.*, vol. 50, no. 10, pp.1377-1383, Oct. 2002.
- [23] **RongLin Li** and V. Fusco, "Printed figure-of-eight wire antenna for circular polarization," *IEEE Trans. Antennas Propagat.*, vol. 50, no. 10, pp.1487-1490, Oct. 2002.
- [24] V. Fusco and **RongLin Li**, "Beam Switched Rhombic Antenna," *Microwave and Optical Technology Letters*, vol. 29, no. 2, pp. 84-85, Apr. 2001.
- [25] **RongLin Li**, V. Fusco, and R. Cahill, "Pattern shaping using a reactively loaded wire loop antenna," *IEE Proceedings-Microwaves, Antennas and Propagation*, vol. 148, no 3, pp. 203-208, June 2001.
- [26] **RongLin Li** and H. Nakano, "Numerical analysis of probe-excited multiple-arm printed wire antennas," *IEE Proceedings - Microwaves, Antennas and Propagation*, vol. 146, no. 1, pp. 70-76, Feb. 1999.
- [27] **RongLin Li**, G. Ni, and J. Yu, "B-Spline finite element method in polar coordinates," *Finite Elements in Analysis and Design*, vol. 28, pp. 337-346, Mar. 1998.
- [28] **RongLin Li** and H. Nakano, "Numerical analysis of arbitrarily shaped probe-excited single-arm printed wire antennas," *IEEE Trans. Antennas Propagat.*, vol. 46, no. 9, pp.1307-1317, Sept. 1998.
- [29] **RongLin Li**, G. Ni, and H. Nakano, "Numerical analysis of printed superquadric wire loop antennas," *IEEE Trans. Magnetics*, vol. 34, no.5, pp. 2787-2790, Sept. 1998.
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- [41] **RongLin Li**, G. Ni, and J. Yu, “A new numerical technique for calculating current distributions on curved wire antennas B-Spline finite element method in parametric form, part I: description of method,” *Chinese Journal of Radio Science*, vol. 11, no. 1, pp. 42-50, 1996. (in Chinese)
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- [45] Book Chapter: Wideband Antennas on Silicon—*The Silicon Heterostructure Handbook* authored by J. Cressler, Marcel Dekker, Inc., 2005.
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